

## CLAIMS

1. Hydraulically controlled valve (1) with at least one hydraulic drive (3, 3') provided with a control piston (5), to which a control plunger (4) is connected, which acts on a flow-control device (2) of the valve (1), by means of which the flow of hydraulic oil from and/or to a consumer (20) can be controlled, where the control piston (5) can be moved by a control pressure  $P_X$  present in a control pressure connection (X) against the force of a control spring (9), characterized in that

-- the control piston (5) is a stepped piston,

-- which has a first step (8) with a diameter  $D_8$ , its end surface  $A_8$  being subjected directly to the control pressure  $P_X$ ; and

-- which has a second step (10) with a diameter  $D_{10}$  and a hydraulically active end surface  $A_{10}$ ;

in that

-- the hydraulic drive (3, 3') has a primary control pressure chamber (7) and a secondary control pressure chamber (11),

-- where the end surface  $A_8$  of the first step (8) is subjected to the pressure in the primary control pressure chamber (7), and

-- the end surface  $A_{10}$  of the second step (10) is subjected to the pressure in the secondary control pressure chamber (11);

and in that

-- a connection (12) containing a throttle point (13) is present between the primary control pressure chamber (7) and the secondary control pressure chamber (11).

2. Valve (1) according to Claim 1, characterized in that the connection (12) containing the throttle point (13) is formed by a ring-shaped gap (14), which is defined by the inside diameter of the primary control pressure chamber (7) and the diameter  $D_8$  of the first step (8) of the control piston (5).

5 3. Valve (1) according to Claim 2, characterized in that the ring-shaped gap (14) has a width of 0.01-0.04 mm.

4. Valve (1) according to Claim 2 or Claim 3, characterized in that the valve (1) is a load-holding brake valve (22).

0 5. Valve (1) according to Claim 2 or Claim 3, characterized in that the valve is a directional control valve (21).

6. Valve (22) according to Claim 4, characterized in that a pressure relief check valve (30) is installed between the primary control pressure chamber (7) and the secondary control pressure chamber (11) to release the pressure from the secondary control pressure chamber (11) to the primary control pressure chamber (7).

15 7. Valve (22) according to Claim 6, characterized in that the pressure difference at which the pressure relief check valve (30) opens can be determined by a spring (31).

8. Valve (1, 21, 22) according to one of Claims 3-7, characterized in that a longitudinal groove (33) is cut into the cylindrical lateral surface of the first stage (8) at the end facing the secondary control pressure chamber (11).

20 9. Valve (22) according to Claim 6 or Claim 7, characterized in that the pressure relief check valve (30) is located inside the hydraulic drive (3) between the primary control pressure chamber (7) and the secondary control pressure chamber (11).

10. Valve (22) according to Claim 9, characterized in that an orifice (42) is installed between the control pressure connection (X) and the primary control pressure chamber (7).

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